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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/635,165	08/09/2000	Zeeman Zhang	00297	5726

7590

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EXAMINER

GAUTHIER, GERALD

ART UNIT	PAPER NUMBER
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2645

18

DATE MAILED: 03/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/635,165

Applicant(s)

ZHANG ET AL.

Examiner

Gerald Gauthier

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>17</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/06/2003 has been entered.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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3. **Claims 1-28** are rejected under 35 U.S.C. 103(a) as being unpatentable over Daudelin (US 4,959,855) in view of Infosino (US 6,327,346).

Regarding **claim 1**, Daudelin discloses a directory assistance call processing and calling customer remote signal monitoring arrangements (column 1, lines 19-22), (which reads on claimed “a network for providing a telecommunications service with automatic speech recognition to a called telecommunications user”), comprising:

a switch (32 on FIG. 1) in communication with a telecommunications device (46 on FIG. 1) associated with the called telecommunications user for detecting a trigger specific (column 4, line 31 “directory assistance requests”) to the service in response to a communication (column 4, line 22 “directory assistance service”) from the telecommunications device and for routing the communication to an operator services system (24 and 52 on FIG. 1) in response to detection of the trigger (column 4, lines 22-65) [The directory assistance service terminal is responsive to the directory assistance request by the customer by connecting the customer to the operator terminal]; and

an intelligent resource server (1 on FIG. 1) in communication with the switch for receiving via the switch the communication from the operator services system with a message including information regarding a calling party (column 7, line 22, “a confirming announcement”) requested by the called telecommunication user from the operator services system, for playing an audible message (column 7, line 24 “announcement of the listed number”) for the called telecommunications user in response to receiving the communication, the audible message containing the information regarding the calling

party and prompting the called telecommunications user to place an outgoing communication (column 7, line 36 "a special request for call setup") to the calling party (column 7, lines 1-31) [The switch prompt the customer to check whether the customer makes a special request for call setup and the voice processing unit sends a confirming announcement to the customer indicating that the call will be set and the announcement includes the listed number].

Daudelin discloses a voice processing unit recognizes commands from the customer but fails to disclose automatically recognizing a predetermined keyword spoken by the called telecommunications user in response to the audible message by digitizing the called telecommunications user's response and comparing the digitized response to a set of coded waveforms corresponding to predetermined keywords.

However, Infosino teaches automatically recognizing a predetermined keyword spoken (column 4, line 45 "voice pattern features") by the called telecommunications user (column 4, line 48 "the user") in response to the audible message (column 4, line 46 "received voice input message") by digitizing the called telecommunications user's response (column 4, line 47 "extracted voice pattern features") and comparing the digitized response to a set of coded waveforms (column 4, line 48 "voice pattern features retrieved from the user profile") corresponding to predetermined keywords (column 4, lines 45-55) [The voice identification device extracts voice pattern features from the received voice input message and compares with the voice pattern features from the user profile database].

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to use the voice recognition by comparing known voice patterns of Infosino in the voice processing units for the directory assistance call processing service of Daudelin.

The modification of the invention would offer the capability of using the voice recognition by comparing known voice patterns such as the system would provide customized call processing based on voice identification.

Regarding **claims 2 and 9**, Daudelin discloses wherein the switch includes a switch of a central office in communication with the telecommunications device via a subscriber line (column 3, lines 52-67).

Regarding **claims 3 and 10**, Infosino teaches wherein the switch includes a switch of a mobile switching center in communication with the telecommunications device via an air interface communication scheme (column 2, lines 27-34).

Regarding **claims 4 and 11**, Daudelin discloses, wherein the switch is further for detecting an originating trigger in response to a feature code entered by the called telecommunications user from the telecommunications device (column 4, lines 6-25).

Regarding **claims 5 and 12**, Daudelin discloses a service control point in communication with the switch for routing the communication from the

telecommunications device to the operator services system upon detecting the originating trigger, and for routing the communication from the operator services system to the intelligent resource server via the switch (column 3, lines 52-67).

Regarding **claims 6, 13, 21 and 26**, Daudelin discloses wherein the intelligent resource server is further for placing the outgoing communication to the calling party based on recognition of the predetermined keyword (column 8, lines 27-47).

Regarding **claims 7, 14, 15, 18, 19, 22, 23, 27 and 28**, Daudelin discloses, wherein the intelligent resource server is further for placing the outgoing communication to the calling party based on recognition of a predetermined DTMF character entered by the called telecommunications user (column 8, lines 27-47).

Regarding **claim 8**, Daudelin discloses a directory assistance call processing and calling customer remote signal monitoring arrangements (column 1, lines 19-22), (which reads on claimed "a network for providing a telecommunications service with automatic speech recognition to a called telecommunications user"), comprising:

a switch (32 on FIG. 1) in communication with a telecommunications device (46 on FIG. 1) associated with the called telecommunications user for detecting a trigger specific (column 4, line 31 "directory assistance requests") to the service in response to a communication (column 4, line 22 "directory assistance service") from the telecommunications device and for routing the communication to an operator services

system (24 and 52 on FIG. 1) in response to detection of the trigger (column 4, lines 22-65) [The directory assistance service terminal is responsive to the directory assistance request by the customer by connecting the customer to the operator terminal];

a call-processing module (12 on FIG. 1) in communication with the switch for receiving via the switch the communication from the operator services system with a message including information regarding a calling party requested (column 7, line 22, "a confirming announcement") by the called telecommunication user from the operator services system (column 7, lines 1-31) [The voice processing unit sends a confirming announcement which includes an announcement of the listed number]; and

an enunciation module (14 on Fig.1) in communication with the call processing module for playing an audible message for the called telecommunications user (column 7, line 24 "announcement of the listed number") in response to receiving the communication, the audible message containing the information regarding the calling party and prompting the called telecommunications user to place an outgoing communication to the calling party (column 7, lines 1-31) [The switch prompt the customer to check whether the customer makes a special request for call setup and the voice processing unit sends a confirming announcement to the customer indicating that the call will be set and the announcement includes the listed number].

Daudelin discloses a voice processing unit recognizes commands from the customer but fails to disclose an automatic speech recognition module in communication with the switch for recognizing a predetermined keyword spoken by the called telecommunications user in response to the audible message by digitizing the

called telecommunications user's response and comparing the digitized response to a set of coded waveforms corresponding to predetermined keywords.

However, Infosino teaches an automatic speech recognition module (230 on FIG. 2) in communication with the switch for recognizing a predetermined keyword spoken (column 4, line 45 "voice pattern features") by the called telecommunications user (column 4, line 48 "the user") in response to the audible message (column 4, line 46 "received voice input message") by digitizing the called telecommunications user's response and comparing the digitized response to a set of coded waveforms (column 4, line 48 "voice pattern features retrieved from the user profile") corresponding to predetermined keywords (column 4, lines 45-55) [The voice identification device extracts voice pattern features from the received voice input message and compares with the voice pattern features from the user profile database].

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to use the voice recognition by comparing known voice patterns of Infosino in the voice processing units for the directory assistance call processing service of Daudelin.

The modification of the invention would offer the capability of using the voice recognition by comparing known voice patterns such as the system would provide customized call processing based on voice identification.

Regarding **claim 16**, Daudelin discloses a directory assistance call processing and calling customer remote signal monitoring arrangements (column 1, lines 19-22),

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(which reads on claimed “an intelligent resource server for providing a telecommunications service with automatic speech recognition for a called telecommunications user”), comprising:

a call processing module (12 on FIG. 1) for receiving via a switch (32 on FIG. 1) in communication with a telecommunications device (46 on FIG. 1) associated with the called telecommunications user a communication from an operator services system (24 and 52 on FIG. 1) with a message including information regarding a calling party (column 7, line 22, “a confirming announcement”) about whom the called telecommunications user requested information (column 7, line 24 “announcement of the listed number”) from the operator services system (column 7, lines 1-31) [The voice processing unit sends a confirming announcement which includes an announcement of the listed number];

an enunciation module (60 on FIG. 1) in communication with the call processing module for playing an audible message for the called telecommunications user (column 7, line 24 “announcement of the listed number”) in response to receiving the communication, the audible message containing the information regarding the calling party and prompting the telecommunications user to place an outgoing communication (column 7, line 36 “a special request for call setup”) to the calling party (column 7, lines 1-31) [The switch prompt the customer to check whether the customer makes a special request for call setup and the voice processing unit sends a confirming announcement to the customer indicating that the call will be set and the announcement includes the listed number].

Daudelin discloses a voice processing unit recognizes commands from the customer but fails to disclose an automatic speech recognition module in communication with the switch for recognizing a predetermined keyword spoken by the called telecommunications user in response to the audible message by digitizing the called telecommunications user's response and comparing the digitized response to a set of coded waveforms corresponding to predetermined keywords.

However, Infosino teaches an automatic speech recognition module (230 on FIG. 2) in communication with the switch for recognizing a predetermined keyword spoken (column 4, line 45 "voice pattern features") by the called telecommunications user (column 4, line 48 "the user") in response to the audible message (column 4, line 46 "received voice input message") by digitizing the called telecommunications user's response and comparing the digitized response to a set of coded waveforms (column 4, line 48 "voice pattern features retrieved from the user profile") corresponding to predetermined keywords (column 4, lines 45-55) [The voice identification device extracts voice pattern features from the received voice input message and compares with the voice pattern features from the user profile database].

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to use the voice recognition by comparing known voice patterns of Infosino in the voice processing units for the directory assistance call processing service of Daudelin.

The modification of the invention would offer the capability of using the voice recognition by comparing known voice patterns such as the system would provide customized call processing based on voice identification.

Regarding **claim 17**, Daudelin discloses wherein the call-processing module is further for placing the outgoing communication to the calling party based on recognition of the predetermined keyword by the automatic speech recognition module in response to the audible message (column 8, lines 27-47).

Regarding **claim 20**, Daudelin discloses a directory assistance call processing and calling customer remote signal monitoring arrangements (column 1, lines 19-22), (which reads on claimed "a method for providing a telecommunications service with automatic speech recognition to a called telecommunications user"), comprising:

detecting a communication (column 4, line 31 "directory assistance requests") from the called telecommunications user (column 4, lines 22-65) [The directory assistance service terminal is responsive to the directory assistance request by the customer by connecting the customer to the operator terminal];

providing information requested by the called telecommunications user regarding a calling party (column 7, line 24 "announcement of the listed number") upon detection of the communication (column 7, lines 1-31) [The voice processing unit sends a confirming announcement which includes an announcement of the listed number]; and

playing an audible message for the called telecommunications user containing the information regarding the calling party (column 7, line 24 "announcement of the listed number") and prompting the called telecommunications user to place an outgoing communication (column 7, line 36 "a special request for call setup") to the calling party (column 7, lines 1-31) [The switch prompt the customer to check whether the customer makes a special request for call setup and the voice processing unit sends a confirming announcement to the customer indicating that the call will be set and the announcement includes the listed number]

Daudelin discloses a voice processing unit recognizes commands from the customer but fails to disclose recognizing a predetermined keyword spoken by the called telecommunications user in response to the audible message by digitizing the called telecommunications user's response and comparing the digitized response to a set of coded waveforms corresponding to predetermined keywords.

However, Infosino teaches recognizing a predetermined keyword spoken by the called telecommunications user (column 4, line 45 "voice pattern features") in response to the audible message (column 4, line 46 "received voice input message") by digitizing the called telecommunications user's response and comparing the digitized response to a set of coded waveforms (column 4, line 48 "voice pattern features retrieved from the user profile") corresponding to predetermined keywords (column 4, lines 45-55) [The voice identification device extracts voice pattern features from the received voice input message and compares with the voice pattern features from the user profile database].

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to use the voice recognition by comparing known voice patterns of Infosino in the voice processing units for the directory assistance call processing service of Daudelin.

The modification of the invention would offer the capability of using the voice recognition by comparing known voice patterns such as the system would provide customized call processing based on voice identification.

Regarding **claim 24**, Daudelin discloses a directory assistance call processing and calling customer remote signal monitoring arrangements (column 1, lines 19-22), (which reads on claimed "a network for providing a telecommunications service with automatic speech recognition to a called telecommunications user"), comprising:

means for detecting a communication (column 4, line 31 "directory assistance requests") from the called telecommunications user (column 4, lines 22-65) [The directory assistance service terminal is responsive to the directory assistance request by the customer by connecting the customer to the operator terminal];

means for playing an audible message for the called telecommunications user containing information regarding a calling party (column 7, line 24 "announcement of the listed number") and prompting the called telecommunications user to place an outgoing communication (column 7, line 36 "a special request for call setup") to the calling party (column 7, lines 1-31) [The switch prompt the customer to check whether the customer makes a special request for call setup and the voice processing unit sends a confirming

announcement to the customer indicating that the call will be set and the announcement includes the listed number]

Daudelin discloses a voice processing unit recognizes commands from the customer but fails to disclose means for recognizing a predetermined keyword spoken by the called telecommunications user in response to the audible message by digitizing the called telecommunications user's response and comparing the digitized response to a set of coded waveforms corresponding to predetermined keywords.

However, Infosino teaches means for recognizing a predetermined keyword spoken by the called telecommunications user (column 4, line 45 "voice pattern features") in response to the audible message (column 4, line 46 "received voice input message") by digitizing the called telecommunications user's response and comparing the digitized response to a set of coded waveforms (column 4, line 48 "voice pattern features retrieved from the user profile") corresponding to predetermined keywords (column 4, lines 45-55) [The voice identification device extracts voice pattern features from the received voice input message and compares with the voice pattern features from the user profile database].

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to use the voice recognition by comparing known voice patterns of Infosino in the voice processing units for the directory assistance call processing service of Daudelin.

The modification of the invention would offer the capability of using the voice recognition by comparing known voice patterns such as the system would provide customized call processing based on voice identification.

Regarding **claim 25**, Daudelin discloses means for providing information requested by the telecommunications user regarding the calling party upon detection of the communication (column 7, lines 37-45).

Response to Arguments

4. Applicant's arguments with respect to **claims 1-28** have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Nakano is cited for a telephone system with message recording function (FIG. 1).


Kaplan is cited for a telephone answering system that automatically calls back a caller who has left a message (FIG. 1).

Solomon et al. is cited for an anonymous interactive telephone system (FIG. 1).

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gerald Gauthier whose telephone number is (703) 305-0981. The examiner can normally be reached on 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang can be reached on (703) 305-4895. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


g.g.
March 21, 2004

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